DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-026045 Address: 333 Burma Road Date Inspected: 09-Jul-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes N/A No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A N/A **Electrode to specification:** No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No **Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component: OBG** Trial Assembly

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) at Trial Assembly Areas

Cross Beam (CB) # 19 to Segment 14 West

This QA Inspector performed Dimension Control Inspection along with Caltrans QA Inspector for measuring offset between the stiffeners at floor beam (FL3) extension at Segment 14 West to Cross Beam # 19 stiffeners at bottom panel, vertical web plate and deck plate at following locations:

At Panel Point (PP) 125, Segment 14 West offset measurement performed between floor beam stiffeners to west side Vertical Web Plate stiffeners of cross beam # 14 total 13 stiffeners.

At Panel Point (PP) 126, Segment 14 West offset measurement performed between floor beam stiffeners to centre Vertical Web Plate stiffeners of cross beam # 14, total 13 stiffeners.

At Panel Point (PP) 127, Segment 14 West offset measurement performed between floor beam stiffeners to east side Vertical Web Plate stiffeners of cross beam # 14, total 13 stiffeners.

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

Between Panel Points (PP) 125 to PP 126, Segment 14 West offset measurement performed between deck panel stiffeners to deck panel stiffeners of cross beam # 14, total 11 stiffeners.

Between Panel Points (PP) 126 to PP 127, Segment 14 West offset measurement performed between deck panel stiffeners to deck panel stiffener of cross beam # 14, total 11 stiffeners.

Between Panel Points (PP) 125 to PP 126, Segment 14 West offset measurement performed between bottom panel stiffeners to bottom panel stiffeners of cross beam # 14, total 5 stiffeners.

Between Panel Points (PP) 126 to PP 127, Segment 14 West offset measurement performed between bottom panel stiffeners to bottom panel stiffener of cross beam # 14, total 5 stiffeners.

Note: The offset between the stiffener recorded out of tolerances, ZPMC and ABF wants to adjust all the offsets at field i.e., Bay Area, U.S.A.

The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition.

Segment 13BW to Segment 13CW (Full Height Longitudinal Diaphragm to Longitudinal Diaphragm)

This QA Inspector performed Dimension Control Inspection on the Full Height Longitudinal Diaphragm to Longitudinal Diaphragm at Work Point W3 (Counter Weight side) and at Work Point W4 (Cross Beam side) for the Segment 13BW to Segment 13CW between Panel Point (PP) 122 to PP 122.5 at the following locations:

The offset was measured at 8 (Eight) different Elevations at vertical web plates.

At Elevation 20mm from the Bottom Panel.

At Elevation 1700mm from the Bottom Panel.

At Elevation 2000mm from the Bottom Panel.

At Elevation 3400mm from the Bottom Panel.

At Elevation 3600mm from the Bottom Panel.

At Elevation 4600mm from the Bottom Panel.

At Elevation 4800mm from the Bottom Panel.

At Elevation 5400mm from the Bottom Panel.

The QA Inspector measured the Offset using 1(One) Meter Straight Edge.

WELDING INSPECTION REPORT

(Continued Page 3 of 4)

The Sweep was measured at 100 mm and 500mm from Floor Beam at Panel Points (PP) 122 and from PP 122.5 at Center (Total 5 Locations) using string line at Elevation 1700mm and 2800mm from Bottom Panel.

The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition.

Segment 13BE to Segment 13CE (Full Height Longitudinal Diaphragm to Longitudinal Diaphragm)

This QA Inspector performed Dimension Control Inspection on the Full Height Longitudinal Diaphragm to Longitudinal Diaphragm at Work Point E3 (Bike Path side) and at Work Point E4 (Cross Beam side) for the Segment 13BE to Segment 13CE between Panel Point (PP) 122 to PP 122.5 at the following locations:

The offset was measured at 8 (Eight) different Elevations at vertical web plates.

At Elevation 20mm from the Bottom Panel.

At Elevation 1700mm from the Bottom Panel.

At Elevation 2000mm from the Bottom Panel.

At Elevation 3400mm from the Bottom Panel.

At Elevation 3600mm from the Bottom Panel.

At Elevation 4600mm from the Bottom Panel.

At Elevation 4800mm from the Bottom Panel.

At Elevation 5400mm from the Bottom Panel.

The QA Inspector measured the Offset using 1(One) Meter Straight Edge.

The Sweep was measured at 100 mm and 500mm from Floor Beam at Panel Points (PP) 117 and from PP 117.5 at Center (Total 5 Locations) using string line at Elevation 1700mm and 2800mm from Bottom Panel.

The measurements were recorded out of tolerance, asked ZPMC to fix the out of tolerance areas and re-offer after rectifications.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations were reported on this date.

WELDING INSPECTION REPORT

(Continued Page 4 of 4)

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Math, Manjunath	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer